



Newsletter of the Survivorship, Outcomes And Risk Program at MSKCC

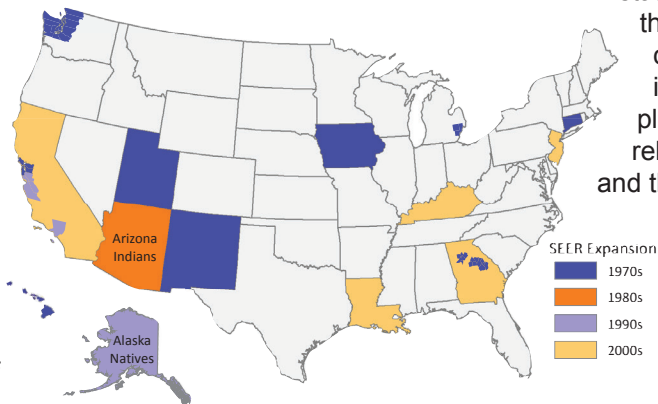
40 Years of Cancer Surveillance:

SEER Program Marks Anniversary

In 2013 the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute celebrated its 40th year of providing high quality data and reports on cancer incidence and survival in the US.

Born out of Richard Nixon's War on Cancer and the National Cancer Act of 1971, data collection for the first national cancer registry began on January 1, 1973 in the states of Connecticut,

Iowa, New Mexico, Utah and Hawaii and the metropolitan areas of Detroit and San Francisco-Oakland. With expansions in the past four decades (see map), SEER now covers 28% of the US population, including 26% of all African Americans, 38% of Hispanics, 44% of American Indians and Alaska Natives, 50% of Asians, and 67% of Hawaiian/Pacific Islanders.



The SEER registries collect data about all incident cancers in their coverage areas, including tumor characteristics, surgery and radiation in the first course of cancer-directed therapy, demographic characteristics and follow-up for vital status and underlying cause of death. More information has been added over time in response to changes in staging systems and the increasing importance of biomarkers. For example, preoperative prostate-specific antigen (PSA) level is now recorded for prostate cancer cases, and estrogen receptor (ER) and progesterone re-

ceptor (PR) status are available for breast cancer cases.

SEER data have been a rich resource for epidemiologists and health services researchers, including a number of SOAR investigators. "SEER data are pretty much indispensable for what we do," said **Sara Olson** (Epidemiology), who has published several papers using data from SEER and the SEER-Medicare linkage. **Shrujal Baxi** (Medicine) recently used SEER data spanning three decades to assess competing mortality risks in long-term survivors of head and neck cancer. Investigators in Biostatistics and Health Outcomes have used the linked SEER-Medicare dataset to study cancer care and outcomes in older adults, including racial disparities, treatment complications, procedure volume and outcome relationships, and the use of new diagnostic and therapeutic technologies.

In addition to the linkage with Medicare claims, SEER records have also been linked with the National Longitudinal Mortality Study (NLMS), which contains detailed socioeconomic and demographic data from several sources. More recently, SEER data were linked to the Medicare Health Outcomes Survey (MHOS), which reports health-related quality of life in Medicare managed care enrollees. In 2003 NCI created the SEER Residual Tissue Repository (RTR) program with the Hawaii, Iowa, and Los Angeles registries to preserve discarded pathology specimens from SEER cancer cases.

Asked about challenges and opportunities for the SEER program going forward, Eric Feuer, Chief of NCI's Statistical Methodology and Applications Branch and 27-year veteran of institute's Surveillance Research Program, noted the role of genomics in the characterization and treatment of cancer and electronic capture of clinical data. "We should be ahead of the curve," Feuer said.

CCNY-MSKCC Partnership Grant Renewed

Award Will Provide Funding for Collaborative Studies to Reduce Cancer Disparities

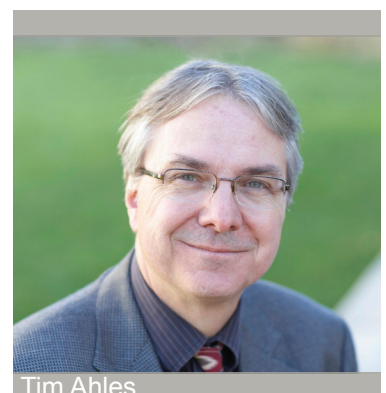
The City College of New York-MSKCC Partnership for Cancer Research, Training, and Community Outreach has received an additional five years of funding through the NCI's cooperative agreement mechanism (U54). The grant provides funding for research, training and community-based programs to reduce health disparities and increase the pool of minority investigators conducting cancer research. The Partnership is led by MSKCC investigators **Tim Ahles** (Psychiatry & Behavioral Sciences) and **Francesca Gany** (Immigrant Health & Cancer Disparities) and CCNY investigators Karen Hubbard and Maurizio Trevisan.

The Partnership received its first U54 award in 2008, led by Dr. Hubbard, a molecular biologist, and Bruce Rapkin, a psychometrician formerly at MSKCC. Since then it has funded more than 20 studies – mostly pilot and pre-pilot investigations – across the translational continuum, as well as undergraduate and graduate training opportunities, community outreach initiatives and research symposia. The Partnership has been especially successful in facilitating collaborations between investigators at the two institutions, drawing on the strengths of MSKCC's clinical resources and expertise in cancer care and CCNY's science faculty and diverse student population.

A focus of the partnership is translating innovations in biology and behavioral science to applied cancer research and clinical practice. **Christian Nelson** (Psychiatry & Behavioral Sciences) and neuroscientist Kaliris Salas-Ramirez (CCNY) received funding from the U54 to study the role of exercise in mitigating cognitive decline associated with androgen deprivation therapy for prostate cancer.

Dr. Salas-Ramirez conducted relevant animal experiments while Dr. Nelson evaluated exercise and cognition in human subjects. In addition to the cognitive effects of cancer treatment, other areas of emphasis in the U54 renewal are community-based intervention and dissemination research; participatory research and identification of biomarkers and genetic risks; biopsychosocial research on stress; mathematical modeling and simulation of psychosocial and behavioral interventions; and increasing the diversity of patients on cancer clinical trials.

Asked how the partnership enhances the work of MSKCC researchers, Ahles said, "CCNY is a university with the full complement of departments and investigators that are not necessarily available at MSKCC." He noted Partnership-funded collaborations between the Biomedical Engineering department at CCNY and surgeons at MSKCC, including several training and research initiatives related to the development and evaluation of new medical devices. A request for proposals for pilot and pre-pilot studies will be issued in early 2014, with a submission deadline anticipated in the spring.



Tim Ahles

Chanel and Goldstein Grants Awarded to MSKCC Investigators

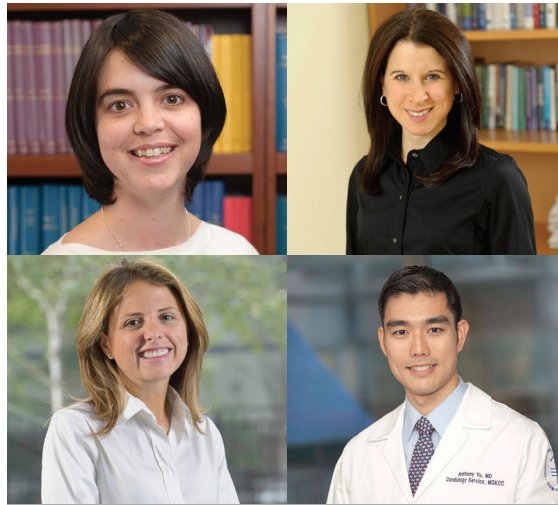
Philanthropic Funds Support Studies in Survivorship, Epidemiology and Health Outcomes Research

Four MSKCC investigators were awarded grants from the Chanel and Goldstein programs. The Chanel Endowment will fund three projects in survivorship research: *CYP2D6 Phenotype, Tamoxifen Treatment and Risk of Contralateral Breast Cancer in the WECARE Study Population*, PI: **Jennifer Brooks** (Epidemiology). Co-investigators include **Jonine Bernstein** (Epidemiology) and **Irene Orlow** (Epidemiology).

Assessing Insulin Sensitivity and Diabetes Mellitus Risk in Neuroblastoma Survivors Treated with Abdominal Irradiation: A Pilot Study, PI: **Danielle Novetsky Friedman** (Pediatrics). Co-investigators include **Charles Sklar** (Pediatrics) and **Chaya Moskowitz** (Biostatistics).

A Phase 2 Trial of Carvedilol for the Prevention of Trastuzumab Induced Cardiac Dysfunction among Women with HER2-Positive Breast Cancer Using Myocardial Strain Imaging for Early Risk Stratification, PI: **Anthony Yu** (Medicine). Co-investigators include **Kevin Oeffinger** (Medicine).

The Goldstein fund will support two projects in epidemiologic methods and health outcomes research: *Tumor Effects on the Measurement of Enhancement on*



Clockwise from top left: Jennifer Brooks, Elena Elkin, Danielle Friedman, Anthony Yu

Breast MRI: Implications for Study Design, PI: **Jennifer Brooks** (Epidemiology). Co-investigators include **Jonine Bernstein** (Epidemiology) and **Malcolm Pike** (Epidemiology).

Patient-Centered Decision Support for Lung Cancer Screening, PI: **Elena Elkin** (Health Outcomes). Co-investigators include **Jennifer Hay** (Psychiatry & Behavioral Sciences) and **Peter Bach** (Health Outcomes).

Beginning in 2006, an endowment from Chanel has provided funding to junior investigators for well-designed, novel clinical and basic studies focused on medical aspects of cancer survivorship. The request for applications is issued every other year, and two to three grants of up to \$75,000 each are awarded. All applications are peer-reviewed for outstanding scientific merit by a panel of survivorship researchers. Since 2004 the Arnold and Arlene Goldstein Family Foundation has generously funded two awards each year up to a maximum of \$50,000 each. The Goldstein funds are designated to support work by SOAR investigators, and topics may include *de novo* investigations using human subjects, detailed analyses of existing databases or laboratory studies with translational potential.

Task Force Recommends Lung Screening

Annual Screens Advised for Current and Former Smokers

The US Preventive Services Task Force finalized its recommendations for lung cancer screening, recommending annual screening with low-dose chest CT for adults age 55-80 with at least a 30 pack-year smoking history. The recommendation applies to current smokers and those who have quit within the past 15 years.

Evidence supporting lung cancer screening comes primarily from the National Lung Screening Trial, a randomized trial of more than 50,000 patients which found reductions in cancer-specific and all-cause mortality with 3 annual CT screens compared to annual chest x-ray. However, the absolute benefit of screening depends on a person's underlying lung cancer risk, and in some cases the benefit may be quite small. Also, the risk of false-positive screens is considerable. In the NLST, more than 24% of all screens were positive, and more than 96% of those were falsely positive.

The USPSTF's recommendation received a B grade for the strength of evidence, reflecting "moderate certainty" that screening is of "moderate net benefit." In addition to clinical trial reports, the Task Force reviewed several model-based studies. In an editorial published online in the *Annals of Internal Medicine*, **Peter Bach** (Health Outcomes) expressed concern at the use of modeling studies, particularly since insurance coverage of USPSTF-recommended services and exemption from deductibles and copayments are now mandated by the Affordable Care Act. Bach noted wide variation between different models and their limited ability to extrapolate accurately from clinical trials.

Mark your calendar

January 21
2:30PM
M-107

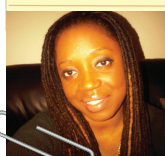
SOAR Seminar
Eva Schernhammer, MD, DrPH
Harvard Medical School

February 25
4:00PM
M-107

SOAR Seminar
Anita Kinney, PhD
University of New Mexico

MEET THE REPORTER

Saidah Henderson, Research Secretary in Psychiatry & Behavioral Sciences, supports the work of Tim Ahles under the CCNY-MSKCC U54 Partnership. A graduate of Queens College, CUNY, Saidah avidly practices the "3 R's" - Reading, Writing and Roller skating. Saidah attends the adult session at Hot Skates (Lynbrook) most Thursday nights. "Rollerskating is a fun cardio workout." Saidah reported on the CCNY-MSKCC Partnership renewal in this issue of *SOAR News*.



SOAR Seminars



Mark Robson, Clinic Director of the Clinical Genetics Service at MSKCC, presented "Pathways to Clinical Utility: Integrating Breast Cancer Susceptibility Testing Into Oncology Practice" on November 21st 2013.



Eva Grunfeld, Professor of Family and Community Medicine at the University of Toronto, presented "Doing it BETTER: Improving Chronic Disease Prevention and Screening in Family Practice" on December 3rd 2013.

SOARNEWS EDITORIAL STAFF

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